## ****📅 Week 1: Fundamentals (Arrays, Hashing, Two Pointers, Sliding Window)****

**Day 1: Arrays & Hashing (Basics)**  
✅ 1. Two Sum  
✅ 121. Best Time to Buy and Sell Stock  
✅ 242. Valid Anagram

**Day 2: Arrays & Hashing (Advanced)**  
✅ 238. Product of Array Except Self  
✅ 347. Top K Frequent Elements

**Day 3: Two Pointers (Basics)**  
✅ 125. Valid Palindrome  
✅ 167. Two Sum II - Input Array is Sorted

**Day 4: Two Pointers (Advanced)**  
✅ 11. Container With Most Water  
✅ 15. 3Sum

**Day 5: Sliding Window (Basics)**  
✅ 3. Longest Substring Without Repeating Characters  
✅ 567. Permutation in String

**Day 6: Sliding Window (Advanced)**  
✅ 424. Longest Repeating Character Replacement

**Day 7: Revision & Mock Test**  
🔄 Solve **5 problems** randomly from the above topics.

## ****📅 Week 2: Stack, Linked List, Binary Search****

**Day 8: Stack (Basics)**  
✅ 20. Valid Parentheses  
✅ 155. Min Stack

**Day 9: Stack (Advanced)**  
✅ 739. Daily Temperatures  
✅ 84. Largest Rectangle in Histogram

**Day 10: Linked List (Basics)**  
✅ 206. Reverse Linked List  
✅ 21. Merge Two Sorted Lists

**Day 11: Linked List (Advanced)**  
✅ 141. Linked List Cycle  
✅ 2. Add Two Numbers

**Day 12: Binary Search (Basics)**  
✅ 704. Binary Search  
✅ 33. Search in Rotated Sorted Array

**Day 13: Binary Search (Advanced)**  
✅ 153. Find Minimum in Rotated Sorted Array

**Day 14: Revision & Mock Test**  
🔄 Solve **5 problems** randomly from the above topics.

## ****📅 Week 3: Trees & Graphs****

**Day 15: Trees (Basics)**  
✅ 226. Invert Binary Tree  
✅ 104. Maximum Depth of Binary Tree

**Day 16: Trees (Advanced)**  
✅ 100. Same Tree  
✅ 102. Binary Tree Level Order Traversal

**Day 17: Trees (BSTs & LCA)**  
✅ 235. Lowest Common Ancestor of a BST

**Day 18: Graphs (Basics - BFS/DFS)**  
✅ 133. Clone Graph  
✅ 200. Number of Islands

**Day 19: Graphs (Topological Sort)**  
✅ 207. Course Schedule

**Day 20: Graphs (Hard)**  
✅ 127. Word Ladder

**Day 21: Revision & Mock Test**  
 Solve **5 problems** randomly from the above topics.

**Beginner / Easy to Medium**

1. Number of Islands – DFS/BFS (Flood Fill)

Tag: Connected components

1. Flood Fill – BFS/DFS

Good for recursion practice

1. Graph Valid Tree – Union-Find / DFS

Acyclic connected components

1. Course Schedule – Topological Sort

Cycle detection in directed graph

**Medium Core Graph Problems**

1. Word Ladder – BFS

Classic shortest path using BFS

1. Clone Graph – DFS/BFS

Graph traversal + deep copy

1. Rotting Oranges – BFS

Multi-source BFS

1. Pacific Atlantic Water Flow – DFS from boundaries

Smart use of DFS and memoization

**Top Advanced Problems**

1. Minimum Height Trees – BFS Topological Pruning

Tricky: Removing leaves layer by layer

1. Alien Dictionary – Topological Sort

Build graph and return valid character order

1. Reconstruct Itinerary – Hierholzer's Algorithm (Eulerian Path)

Cheapest Flights Within K Stops – BFS/Dijkstra variant

Graph + dynamic constraint (K stops)

1. Redundant Connection II – Union-Find with multiple roots

Hard-level graph structure manipulation

## ****📅 Week 4: Dynamic Programming, Greedy, Backtracking****

**Day 22: DP (Basics)**  
✅ 70. Climbing Stairs  
✅ 198. House Robber

**Day 23: DP (Advanced)**  
✅ 5. Longest Palindromic Substring  
✅ 322. Coin Change

**Day 24: Greedy**  
✅ 55. Jump Game  
✅ 134. Gas Station

**Day 25: Backtracking (Basics)**  
✅ 78. Subsets  
✅ 46. Permutations

**Day 26: Backtracking (Advanced)**  
✅ 79. Word Search

**Day 27: Revision & Mock Test**  
🔄 Solve **5 problems** randomly from the above topics.

**Day 28: Full-Length Mock Interview**  
🎯 **Solve 3 Easy, 4 Medium, and 2 Hard problems** in **2 hours**